

TREASURE

OUR

south carolina

COASTS

and

ESTUARIES

SOUTH CAROLINA'S COASTAL ZONE ENCOMPASSES BEACHES, COASTAL WATERWAYS, AND SALT MARSHES. MAJOR INDUSTRIES THAT DEPEND ON THESE REGIONS INCLUDE 70% OF THE STATE'S \$20 BILLION ANNUAL TOURISM REVENUES, AS WELL AS COMMERCIAL HARVEST OF SHRIMP, CRABS, OYSTERS, CLAMS, AND FINFISH. SIGNIFICANT COASTAL ISSUES INCLUDE RAPID POPULATION GROWTH—HORRY COUNTY, ADJACENT TO THE NORTH CAROLINA BORDER, IS NOW THE THIRD FASTEST GROWING COUNTY IN THE US. THE COASTAL ZONE MANAGEMENT ACT (CZMA) PROVIDES THE FRAMEWORK NECESSARY TO SUSTAIN THE ECONOMIC AND ECOLOGICAL VALUE OF SOUTH CAROLINA'S COASTAL AREAS. THIS LAW, WHICH IS ADMINISTERED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), RECOGNIZES A NATIONAL INTEREST IN OUR COASTAL AND OCEAN AREAS. IT ALLOWS STATES AND TERRITORIES, NOT THE FEDERAL GOVERNMENT, TO DETERMINE HOW BEST TO BALANCE CONSERVATION OF THE COASTAL ENVIRONMENT WITH HUMAN USES THAT DEPEND ON COASTAL RESOURCES.

miles of coastline
2,876

coastal population in 2000
1,653,346

fy03 czma core (section 306)
funding
\$2,000,000

fy03 czma enhancements
(section 309) funding
\$352,000

fy03 coastal nonpoint
implementation
\$208,000

fy03 national estuarine research
reserve operations, education,
monitoring and stewardship
\$1,384,000

fy03 national estuarine research
reserve land acquisition/
construction
\$4,470,700

THE CZMA IN SOUTH CAROLINA

The CZMA establishes two programs to balance the use and protection of America's coasts. The Coastal Management Program gives states a flexible framework to address a broad range of community development, economic, and natural resource issues at the state and local level. The National Estuarine Research Reserve System protects key coastal areas for long-term scientific study, education, and resource stewardship.

South Carolina Coastal Management Program

Approved: 1979

Lead Agency: Department of Health and Environmental Control

South Carolina's coastal program oversees activities that affect the state's coastal waters, tidelands, beaches and dunes that are designated as "critical areas" within its eight coastal counties. The coastal program also works with state agencies and local governments to ensure that activities outside of critical areas, but within the coastal zone, are consistent with the state's coastal policies.



Accomplishments of South Carolina's coastal program include:

- *strengthening its protection of beaches, dunes and oceanfront through the Beachfront Management Act;*
- *developing a Special Area Management Plan for the Charleston Harbor Estuary and drawing on this experience to develop a plan for Beaufort County by creating a dialogue among a broad range of interested parties;*
- *producing and distributing publications that outline actions that individuals and local governments can take to help safeguard sensitive coastal resources; and*
- *developing a unique disaster preparedness tool using information technology that will help speed up the post-disaster response from the coastal program, FEMA and other relief and regulatory agencies following coastal storms.*

South Carolina's National Estuarine Research Reserves

ACE Basin National Estuarine Research Reserve

Designation: 1992

Lead Agency: Department of Natural Resources

ACE Basin, named for the Ashepoo, Combahee and Edisto rivers, is one of the largest undeveloped estuaries on the East Coast. Passing cypress swamps and tidal marshes, the rivers meet at the biologically rich St. Helena Sound. The reserve encompasses parts of Colleton, Charleston and Beaufort counties.

RESEARCH: The reserve continuously monitors water quality and weather to evaluate the overall health of the ACE Basin ecosystem. The reserve also researches the abundance and types of important plant and animal species to enable long-term protection of these resources.

EDUCATION AND OUTREACH: The reserve informs coastal decision makers, lawmakers, teachers, students and the general public through a variety of educational programs. The reserve sponsors a summer lecture series, develops curriculum materials for teachers, offers a touch tank program for children and conducts educational cruises where students and teachers learn about estuaries and their values to marine life.

North Inlet-Winyah Bay National Estuarine Research Reserve

Designation: 1992

Lead Agency: Belle W. Baruch Institute for Marine Biology and Coastal Research, University of South Carolina

The reserve encompasses 12,237 acres in Georgetown County and is comprised of the relatively pristine North Inlet, presently most of its watershed in a natural forested state, and Winyah Bay, the estuary with the third largest watershed on the east coast. Winyah Bay has been greatly influenced by agriculture, industry and other human activities. The reserve is home to many threatened and endangered species, including sea turtles, sturgeons, least terns and wood storks.

RESEARCH: More than 75 research and environmental monitoring projects are conducted in the reserve each year. University researchers use data generated by the National Estuarine Research Reserve System-wide Monitoring Program to assess short- and long-term variability and change in the two estuaries and to support field and laboratory studies.

EDUCATION AND OUTREACH: Research results are integrated into short courses, seminars, field studies and tours to educate public school children, teachers and decisionmakers. Workshops designed to engage coastal decisionmakers on important coastal issues have been very successful, covering such issues as stormwater management, beach management, and coastal hazards mitigation.

PARTNERSHIPS IN ACTION

South Carolina's coastal program, working with the U.S. Environmental Protection Agency and the Army Corps of Engineers, aggressively investigated alterations to coastal wetlands to identify and act against violations of the Clean Water Act. Through aerial photographs, the agencies identified and investigated areas that had changed dramatically over a short time. Violations were found at four of the approximately 30 sites investigated, totaling an estimated loss of 53 acres of wetlands. The increased enforcement activity led to better use of construction practices that reduce pollutants in stormwater runoff, such as silt fencing around construction sites. It also led to restoration or mitigation of damage caused by illegal activity.

Both the ACE Basin and North Inlet National Estuarine Research Reserves have been working in partnership with South Carolina's Coastal Management Program and other state and local partners to implement Coastal Training Programs for decisionmakers, building on the successful series of workshops sponsored by the reserves and Coastal Program for the past six years. Training programs are strategically planned to address identified needs of local decisionmakers.